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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,379	06/20/2003	Steve B. Taylor	2236.001	7549

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EXAMINER

MACARTHUR, VICTOR L

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

10/600,379

Applicant(s)

TAYLOR, STEVE B.

Examiner

Victor MacArthur

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 23-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/20/2003</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-22, drawn to a coupler, classified in class 403, subclass 79.
- II. Claims 23-31, drawn to a method of making a coupler, classified in class 29, subclass 428.

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process of making a coupler, as described in claims 23-31, could result in a product other than the coupler disclosed in claims 1-22. For instance, a coupler, which does not having a substantially flat planar surface (claim 1) or opposing yokes (claim 11).

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Ray Reagan on 12/06/04 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 23-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Drawings***

The drawings are objected to because in figure 2 the element labeled 34d should be labeled 32d to conform to the specification and the rest of the drawings. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

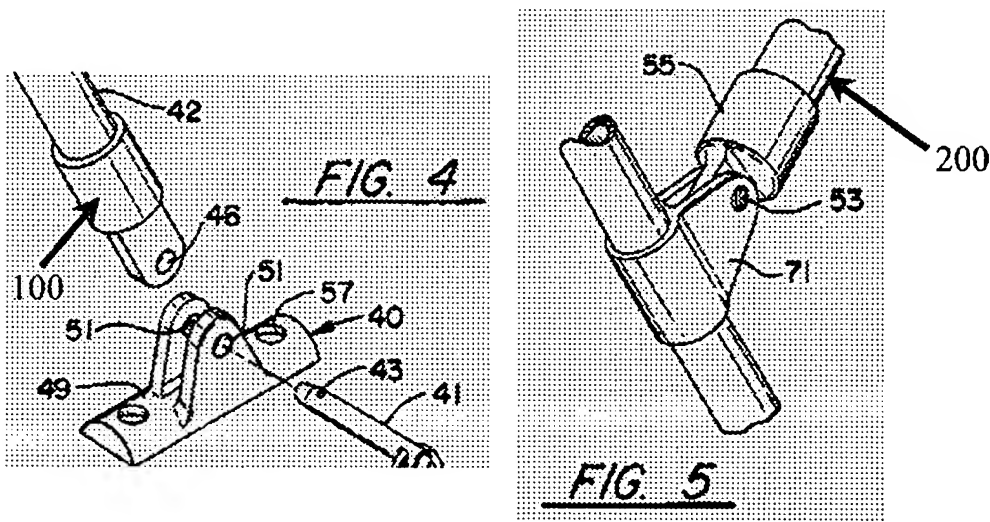
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Murray U.S.

Patent 5697320 (see marked-up figures below).



Claim 1. Murray discloses (figs. 1, 4, 5) a variably positionable coupler mountable on a curved surface, comprising: a base (40) formed with an upper side and a lower side, wherein the lower side is a substantially flat planar surface; means (57) for mounting the base on the curved surface; a tub (100) adjustably connectable to the base; a plug (42, 71) repositionably attachable to the tub; a neck (55) rotatably insertable in the plug, wherein the neck is formed for securing a

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shaft (200) to the neck; and a clevis mechanism (clevis connection between 55 and 71) slidably and demountably engageable with the plug and the neck. (Note that while the Murray curved surface does not curve at its point of contact with element 40, it does curve elsewhere and is thus a curved surface within the broadest reasonable interpretation of the claim language).

Claim 2. Murray discloses opposing yokes (tab portions of 40 receiving 41) monolithically extending at substantially right angles from the upper side of the base.

Claim 3. Murray discloses one or more bores (51) formed in the base with a proximal end and a distal end, and further wherein the one or more bores are shaped for removable engagement with a bolt (41). The word "bolt" is taken by the examiner to mean, "a metal rod or pin for fastening objects together" in accordance with Merriam-Webster's Collegiate Dictionary Tenth Edition.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murray U.S. Patent 5697320 (see marked-up figures above) in view of Landgrebe U.S. Patent 5704749.

Claim 4. Murray does not disclose a frustoconical recess. Landgrebe teaches (fig.1 and cols.3-4) a frustoconical recess (35, 55) formed adjacent the proximal end of one or more bores (portion of B receiving A), which is beneficial for improving the alignment of a fastener within a

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bore during assembly (col.4, ll.1-20). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the coupler of Murray to include, frustoconical recesses, as taught by Landgrebe, for the purpose of improving fastener alignment during assembly.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murray U.S. Patent 5697320 (see marked-up figures above) in view of Landgrebe U.S. Patent 5704749, as applied to claim 4 above, and further in view of Schroeder U.S. Patent 1257536.

Claim 5. Murray discloses that the means for mounting comprises a plurality of holes but does not specify what type of fasteners and washers are used. Schroeder teaches (figs.1 and 2) a means for mounting that is a of ball washer assembly received in a concave cup (portion of 4 receiving 8) formed adjacent a distal end of one or more bores (hole portion of 4 receiving 10). Schroeder states (p.2, ll.55-95) that ball washer means for mounting are beneficial for mounting components in a variety of positions. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt the means for mounting, as taught by Schroeder, to be used at each hole of the Murray means for mounting, since Murray does not specify the what type of fasteners and washers are used and the Schroeder ball washer assembly is beneficial for mounting components in a variety of positions.

Claims 6-13 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray U.S. Patent 5697320 (see marked-up figures above) in view of Schroeder U.S. Patent 1257536.

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Claim 6. Murray discloses that the means for mounting comprises a plurality of holes but does not specify what type of fasteners and washers are used. Schroeder teaches (figs. 1 and 2) a means for mounting that is a of ball washer assembly. Schroeder states (p.2, ll.55-95) that ball washer means for mounting are beneficial for mounting components in a variety of positions. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt the means for mounting, as taught by Schroeder, to be used at each hole of the Murray means for mounting, since Murray does not specify what type of fasteners and washers are used and the Schroeder ball washer assembly is beneficial for mounting components in a variety of positions.

Claim 7. Murray as modified by Schroeder suggests that the plurality (Murray) of ball washer (Schroeder) assemblies includes a second threaded bolt (Schroeder, 10) formed with a first diameter.

Claim 8. Murray as modified by Schroeder suggests that the plurality of ball washer assemblies includes a ball washer (Schroeder, 8).

Claim 9. Schroeder teaches that the ball washer is formed with a substantially hemispherical exterior surface (top of 8), an interior surface (bottom of 8), and a duct (hole within 8) between the substantially hemispherical exterior surface and the interior surface formed with a second diameter larger than the first diameter of the second threaded bolt.

Claim 10. Schroeder teaches a nut assembly (15).

Claim 11. Murray discloses a coupler system, comprising: a base (40) formed with opposing yokes (yoke portions of 40 receiving 41); means (57) formed in the base for mounting the base on a curved surface; a boom-swivel device (42, 71, 55) detachably fixable to the base



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for securing a shaft (200) to the coupler system. Murray discloses that the means for mounting comprises a plurality of holes (57) but does not specify what type of fasteners and washers are used with the holes. Schroeder teaches (figs. 1 and 2) a ball washer assembly combinable with mounting means (hole 5). Schroeder states (p. 2, ll. 55-95) that a ball washer is beneficial for mounting components in a variety of positions. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt the washer assembly, as taught by Schroeder, to be combined with each hole of the Murray means for mounting, since Murray does not specify what type of fasteners and washers are used and the Schroeder ball washer assembly is beneficial for mounting components in a variety of positions.

Claim 12. Murray discloses that the opposing yokes are formed with opposing apertures (51).

Claim 13. Murray discloses that the mounting means includes a bore (57) formed in the base.

Claim 16. Murray as modified by Schroeder suggests that the plurality (Murray) of ball washer (Schroeder) assemblies includes a bolt (Schroeder, 10) formed with a first diameter.

Claim 17. Murray as modified by Schroeder suggests that the plurality of ball washer assemblies includes a ball washer (Schroeder, 8) formed with a duct (9) having a second diameter larger than the first diameter of the bolt.

Claim 18. Murray as modified by Schroeder suggests that the plurality of ball washer assemblies includes a nut assembly (15).

Claim 19. Murray discloses that the boom-swivel device includes at least one tub (100) adjustably connectable to the opposing yokes.

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Claim 20. Murray discloses that the boom-swivel device includes a plug (42, 71) repositionably attachable to the tub.

Claim 21. Murray discloses that the boom-swivel device includes a neck (55) for supporting a shaft (200) rotatably insertable in the plug.

Claim 22. Murray discloses that the boom-swivel device includes a clevis mechanism (clevis between 55 and 71) engageable with the plug and the neck.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray U.S. Patent 5697320 (see marked-up figures above) in view of Schroeder U.S. Patent 1257536, as applied to claim 13 above, and further in view of Landgrebe U.S. Patent 5704749.

Claim 14. Murray does not disclose a recess. Landgrebe teaches (fig.1 and cols.3-4) a recess (55) formed in one end of a bore (portion of B receiving A), which is beneficial for improving the alignment of a fastener within a bore during assembly (col.4, ll.1-20). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the coupler of Murray to include, a recess, as taught by Landgrebe, for the purpose of improving fastener alignment during assembly.

Claim 15. Schroeder teaches a mounting means that includes a cup (portion of 4 receiving 8) formed in the other end of a bore (5) for supporting the ball washer.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Referring to couplers:

Czipri U.S. Patent 6594860

Aldridge U.S. Patent 4561797

Jordan U.S. Patent 6053122

Cooper U.S. Patent 6142438


Ostrom U.S. Patent 6488644

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

VLM  
February 18, 2004

  
**Lynne H. Browne**  
**Supervisory Patent Examiner**  
**Technology Center 3600**